

Title (en)

INTERFERENCE EXPOSURE DEVICE AND METHOD

Title (de)

INTERFERENZBELICHTUNGSVORRICHTUNG UND -VERFAHREN

Title (fr)

DISPOSITIF ET PROCÉDÉ D'EXPOSITION À DES INTERFÉRENCES

Publication

**EP 2749948 A1 20140702 (EN)**

Application

**EP 12825707 A 20120816**

Priority

- CN 201110241758 A 20110822
- CN 2012080258 W 20120816

Abstract (en)

An interference exposure device, including: a light source (100) for providing an exposure light beam; a light homogenizer-collimator (200) for homogenizing and collimating the exposure light beam; an interference unit (300) including at least two gratings (303) for converting the exposure light beam into at least two coherent light beams and making the coherent light beams converge on a substrate surface to form thereon an interference exposure pattern, the gratings (303) each having a period and being distributed in correspondence with a desired exposure pattern; a driving and supporting means (406) for supporting and carrying the substrate to move with at least three degrees of freedom; and a measuring element (500) for measuring an angle between coordinate systems of the interference unit (300) and the means (406) to adjust an exposure position of the means (406) based on a measurement result of the measuring element (500) before exposing the substrate.

IPC 8 full level

**G03F 7/20** (2006.01)

CPC (source: EP KR US)

**G01B 11/14** (2013.01 - EP US); **G01B 11/26** (2013.01 - EP US); **G03F 7/20** (2013.01 - KR); **G03F 7/2006** (2013.01 - KR); **G03F 7/70208** (2013.01 - US); **G03F 7/70408** (2013.01 - EP US); **G03F 7/70775** (2013.01 - EP US); **G03F 9/7007** (2013.01 - EP US)

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